

Amendment to the Claims

The listing of claims will replace all prior versions, and listings, of claims in this application:

1 (Currently Amended) A one-piece closure for a container comprising:

- (a) an inner cylindrical wall having first and second ends and defining a space;
 - (b) an outer cylindrical wall opposite the inner cylindrical wall and having said first and second ends to form an outer surface of the closure;
 - (c) a first end wall extending across said first end, wherein said first end wall comprises a recess extending at least partially into said space, and a first set of threads disposed on said recess having a right hand direction or a left hand direction; and
- a second set of threads disposed on said inner or outer cylindrical wall having a left hand direction or right hand direction which is opposite that of the first set of threads.

Claim 2 canceled.

3. (Previously Presented) A closure as claimed in claim 1, wherein said first set of threads have a left hand direction, and said second set of threads have a right hand direction.

4. (Original) A closure as claimed in claim 3, wherein the closure comprises a plurality of ramp-shaped protrusions which extend in a direction away from the closure.

5 (Previously Presented) A closure as claimed in claim 3, wherein a portion of the end wall surrounds the recess and comprises a plurality of ramp-shaped protrusions arranged along the radial perimeter of the end wall and extend in a direction away from the second end.

Claim 6 canceled.

7. (Previously Presented) A closure as claimed in claim 1, wherein said second set of threads is disposed on said inner cylindrical wall and said outer cylindrical wall comprises a plurality of vertically extending ridges.

8. (Previously Presented) A closure as claimed in claim 1, wherein the recess comprises an second end wall disposed opposite the first end wall.

9. (Original) A closure as claimed in claim 8, wherein the recess is adapted to receive a threaded spindle and the second wall arrests the downward movement of the threaded spindle.

10 (Previously Amended) A closure as claimed in claim 1, further comprising a plug seal located between the recess and outer cylindrical wall adapted to frictionally engage the container being sealed.

11. (Original) A closure as claimed in claim 1, further comprising a crush rib located at the first end wall and adapted to be biased against a container when the closure is on the container to provide a sealing effect.

Claims 12-13 canceled.

14. (Currently Amended) A one-piece closure for a container comprising:
 (a) an inner cylindrical wall having first and second ends and defining a space;

(b) an outer cylindrical wall opposite the inner cylindrical wall and having said first and second ends to form an outer surface of the closure;

(c) a first end wall extending across said first end, wherein said first end wall comprises a recess extending a least partially into said space, and a first set of threads disposed on said recess having a right hand direction or a left hand direction; and

(d) a second set of threads formed disposed on said inner cylindrical wall having a left hand direction or right hand direction which is opposite that of the first threads.

15. (Withdrawn) A combination container and a closure comprising the closure as claimed in claim 1 and a container having an opening at one end adapted to receive the closure.

16. (Withdrawn) A combination container and a closure comprising the closure as claimed in claim 15, wherein at least the opening of the container is cylindrical and has threads disposed in the vicinity of the opening adapted to receive the second set of threads.

17. (Withdrawn) A combination container and closure as claimed in claim 16, wherein the threads are disposed on the outer surface of the container and the second set of threads are disposed on the inner cylindrical wall.

18. (Withdrawn) A combination container and closure as claimed in claim 16, wherein the container comprises two cylindrical containers connected by a rib to prevent rotation of the containers when the closures are being removed.

19. (Withdrawn) A combination container and closure as claimed in claim 18, wherein one of the two containers is tapered at the bottom.

Claims 20-34 canceled.

35. (Withdrawn) A method for removing a closure on a container comprising:
- providing a closure according to claim 1 arranged on a container;
 - providing a rotatable threaded spindle
 - bringing the rotatable threaded spindle into proximity with the recess on the first end wall;
 - screwing the threaded spindle into the first set of threads on the recess; and
 - moving the threaded spindle having the closure threaded thereon away from the container, thereby removing the closure from the container.
36. (Withdrawn) A method according to claim 35, wherein the recess comprises a second end wall disposed opposite the first end wall and the threaded spindle is screwed into the depression until it reaches the second end wall.
37. (Withdrawn) A method according to claim 35, wherein the weight of the closure and the engagement of the threaded spindle with the threaded recess is sufficient to unscrew the closure from the threaded spindle when the closure is not supported on the container, and the method further comprises providing a clutch having an element adapted to engage the closure and apply a rotational force to the closure, engaging the element with the closure to prevent the spindle from being unscrewed from the closure.
38. (Withdrawn) A method according to claim 37, wherein a portion of the first end wall that surrounds the recess comprises a plurality of ramp-shaped protrusions arranged along the radial perimeter of the first end wall and extend in a direction away from the second end, and wherein the elements of the clutch and the ramp shaped protrusions abut each other during the engagement of the element with the closure to prevent rotation of the closure relative to the clutch.

39. (Withdrawn) A method for installing a closure on a container comprising:

- providing a closure according to claim 1;

- providing a rotatable threaded spindle having the closure screwed thereon, wherein the weight of the closure and the engagement of the threaded spindle with the threaded recess is sufficient to unscrew the closure from the threaded spindle when the closure is not supported on the container;

- providing a clutch having an element adapted to engage the closure and apply a rotational force to the closure;

- engaging the element with the closure to prevent the spindle from being unscrewed from the closure;

- moving the threaded spindle having the closure screwed thereon into proximity with an opening on the container; and

- rotating the spindle and clutch in a direction to unthread the spindle from the closure.

40. (Withdrawn) A method according to claim 39, wherein the closure has a second set of threads disposed on the inner or outer cylindrical wall having a direction which is opposite that of the first set of threads, and at least the opening of the container is cylindrical and has threads disposed in the vicinity of the opening to receive the second set of threads to form a sealing closure, and

- wherein the rotation of the spindle and clutch and the engagement of the clutch element with the closure provides sufficient rotational force to thread the closure onto the container.

41. (Withdrawn) A method according to claim 40, wherein a portion of the first end wall that surrounds the recess comprises a plurality of ramp-shaped protrusions arranged along the radial perimeter of the first end wall and extend in a direction away from the second end, and wherein the elements of the clutch and the ramp shaped protrusions abut each other during the engagement of the element with the closure to prevent rotation of the closure relative to the clutch until a

predetermined torque is reached, and wherein when the predetermined torque is reached, the clutch and spindle rotate relative to the closure and the spindle become unthreaded from the closure, thereby releasing the closure.

42. (Withdrawn) A method according to claim 41, further comprising moving the spindle and the clutch away from the closure when the closure is released from the spindle.

43. (Withdrawn) An analyzer comprising:
a metering probe capable of dispensing or aspirating a liquid;
an incubator;
a measurement system for measuring a parameter of a sample;
a combination container for containing a reagent and a closure comprising the closure as claimed in claim 1 and a container having an opening at one end and adapted to receive the closure; and
an apparatus for removing and installing the closure on the reagent container comprising:
a threaded rotatable spindle adapted for threading into a closure having a threaded recess and for applying a rotational force to remove the closure; and
a clutch having an element adapted to engage the closure and apply a rotational force to the closure.

Claims 44 and 45 canceled.

46. (Original) A closure as claimed in claim 1, wherein the first set of threads are dual lead threads.

47. (Withdrawn) A closure as claimed in claim 17, wherein the threads on the spindle are dual lead.

48. (Previously Presented) A closure as claimed in claim 4, wherein the ramp-shaped protrusions are adapted to engage corresponding elements on a removal device.